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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,334	10/09/2003	Gary A. Evans	BPHOTO.012	9844
7590	10/04/2005		EXAMINER	
Duke W. Yee Carstens, Yee & Cahoon, LLP P.O. Box 802334 Dallas, TX 75380			GOLUB, MARCIA A	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/682,334	EVANS ET AL.	
	Examiner	Art Unit	
	Marcia A. Golub	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14 is/are allowed.
- 6) ☒ Claim(s) 1,5,6,15,16,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-4,7-9,17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/9/2003</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities:

In paragraph 51 "Fig. 7a" should be replaced with "Fig. 7". In the last sentence of paragraph 53 the word "fore" should be replaced with the word "for".

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 5, 6, 15, 16, 18, and 19** are rejected under 35 U.S.C. 102(b) as being anticipated by Evans (U.S. Pub 2002/0126942 now a patent 6,775,427).

Regarding **claim 1**, Fig 1 of Evans discloses "A surface emitting semiconductor laser system, comprising: a first cavity and a second cavity sharing an axis [z axis], the first and second cavities overlapping at an out-coupling aperture [8]."

Regarding **claims 5 and 6**, Fig 2B of Evans discloses " A surface emitting semiconductor laser system, comprising: four cavities (8/11-13), each of the cavities resonating at a different central wavelength (7/61-63); wherein each of the four cavities overlaps a single out-coupling aperture [8]; wherein first and second cavities of the four cavities share a first axis [z axis], and wherein third and fourth cavities of the four cavities share a second axis [y axis]."

Regarding **claims 15 and 16**, Fig 2B of Evans discloses "A semiconductor laser system, comprising: four cavities, each of the cavities overlapping at a first out-coupling aperture [8]; wherein first and second cavities of the four cavities share a first axis [z axis], and wherein third and fourth cavities share a second axis [y axis];

Regarding **claims 18 and 19**, Fig 2B of Evans discloses "A surface emitting semiconductor laser system, comprising: a first cavity and a second cavity sharing a first axis [z axis]; a third cavity and a fourth cavity sharing a second axis [y axis]; wherein the first, second, third, and fourth cavities intersect at an out-coupling aperture [8]; wherein the first cavity produces light of a first wavelength, the second cavity produces light of a second wavelength, the third cavity produces light of a third wavelength, and the fourth cavity produces light of a fourth wavelength." (7/61-63)

***Allowable Subject Matter***

Claims 2-4, 7-9 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Evans discloses a surface emitting semiconductor laser device, comprising four cavities overlapping at OCG, each cavity having a reflector at one end. He does not disclose a second reflector at the other end of each cavity, where the individual cavities of each laser overlap. The aforementioned features in combination with the rest of the limitations of the claims are novel.

Claims 10-14 are allowed.

The following is an examiner's statement of reasons for allowance: Evans discloses a surface emitting semiconductor laser device, comprising four cavities overlapping at OCG, each cavity having a reflector at one end. He does not disclose a second reflector at the other end of each cavity, where the individual cavities of each laser overlap. In addition, the reflectors positioned around the OCG are reflective of wavelength corresponding to one laser, but transmissive to wavelength corresponding to other laser on the same axis. The aforementioned features in combination with the rest of the limitations of the claims are novel.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


***Fax/Telephone Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcia A. Golub whose telephone number is 571-272-0218. The examiner can normally be reached on M-F 8-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2828

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Zandra Smith  
Primary Examiner

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